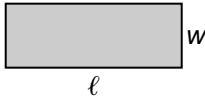
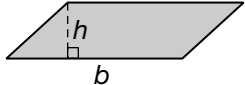


Area (pages 30–33)

The **area** (A) of a closed figure is the number of square units needed to cover its surface.

Area of Rectangles	The area (A) of a rectangle equals the product of its length (ℓ) and width (w). $A = \ell w$	
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A **parallelogram** is a four-sided figure whose opposite sides are parallel. One of its sides is called its **base**. The distance from the base to the opposite side is called the **height**. The area of a parallelogram is closely related to the area of a rectangle.

Area of Parallelograms	The area (A) of a parallelogram equals the product of its base (b) and height (h). $A = bh$	
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EXAMPLES

- A** Find the area of a rectangle with a length of 20 cm and a width of 4 cm.

$A = \ell w$ Write the formula for area.
 $A = 20 \times 4$ Replace ℓ with 20 and w with 4.
 $A = 80$ Multiply.
 The area is 80 cm^2 .

- B** Find the area of a parallelogram with a base of 13 m and a height of 5 m.

$A = bh$ Write the formula for area.
 $A = 13 \times 5$ Replace b with 13 and h with 5.
 $A = 65$ Multiply.
 The area is 65 m^2 .

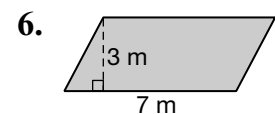
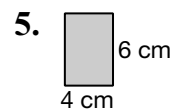
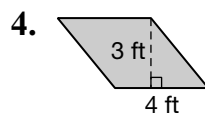
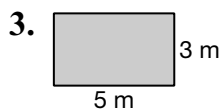
Try These Together

1. Find the area of a rectangle with a length of 15 in. and a width of 12 in.
HINT: The area of a rectangle is length times width.

2. Find the area of a parallelogram with a base of 24 ft and a height of 11 ft.
HINT: The area of a parallelogram is base times height.

PRACTICE

Find the area of each rectangle or parallelogram.



7. **Standardized Test Practice** The Angtuaco family is putting sod in their backyard. Their backyard is in the shape of a parallelogram with a base of 60 feet and a height of 100 feet. How many square feet of sod will they need to cover their backyard?

A 120 ft^2

B 600 ft^2

C $6,000 \text{ ft}^2$

D $1,200 \text{ ft}^2$

Answers: 1. 180 in^2 2. 264 ft^2 3. 15 m^2 4. 12 ft^2 5. 24 cm^2 6. 21 m^2 7. C